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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 12/09/2010

Joseph K. Hemby, Jr. Naval Medical Research Center Office of Counsel 503 Robert Grant Avenue Silver Spring, MD 20910-7500

EXAMINER				
GAMBEL, PHILLIP				
ART UNIT	PAPER NUMBER			

1644

DATE MAILED: 12/09/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/027.205	02/20/1998	CARL H. JUNE	36119-126	2825

TITLE OF INVENTION: METHODS FOR DOWNREGULATING CCR5 IN T CELLS WITH ANTI-CD3 ANTIBODIES AND ANTI-CD28 ANTIBODIES

I	APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
	nonprovisional	NO	\$1510	\$0	\$0	\$1510	03/09/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:**

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on the Patent, advance on the Patent, advance of the Patent in Block 1, by (a	rders and notification of ra) specifying a new corres	naintenance fees vepondence address	vill be ; and/o	mailed to the current (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Fee	(s) Transmittal. Thers. Each additiona	is certii I naper	icate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must
Iosanh V. Ham		/2010		Cer	tificate	of Mailing or Trans	mission
Joseph K. Hen Naval Medical F 503 Robert Grar	Research Center Off	ice of Counsel	The Stat add tran	reby certify that the es Postal Service versed to the Mail smitted to the USP	us Fee(vith suf Stop TO (57	ficient postage for first ISSUE FEE address 1) 273-2885, on the d	deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
Silver Spring, M	ID 20910-7500						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
09/027,205	02/20/1998		CARL H. JUNE			36119-126	2825
TITLE OF INVENTION ANTIBODIES	ON: METHODS FOR	DOWNREGULATING	CCR5 IN T CELLS V	VITH ANTI-CD3	ANT	IBODIES AND AN	TI-CD28
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0		\$1510	03/09/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]			
GAMBEL	, PHILLIP	1644	424-148100				
 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 			(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Unl	less an assignee is ident h in 37 CFR 3.11. Comp	ified below, no assignee	T a substitute for filing an (B) RESIDENCE: (CITY	atent. If an assign assignment. and STATE OR C	COUNT	'RY)	ocument has been filed for
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Co	orporat	on or other private gro	oup entity Government
4a. The following fee(s)	are submitted:	41	b. Payment of Fee(s): (Plea	ise first reapply ai	ny prev	iously paid issue fee	shown above)
☐ Issue Fee ☐ Publication Fee (N	No small entity discount p	permitted)	☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.				
Advance Order -	# of Copies		The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	tus (from status indicated	· · · · · · · · · · · · · · · · · · ·	☐ b. Applicant is no lon				
NOTE: The Issue Fee an	d Publication Fee (if req		d from anyone other than t				e assignee or other party in
•				Date.			_
Typed or printed name This collection of information is required by 37 CFR 1.311. The information is required			on is required to obtain or a	etain a benefit by t	he pub	ic which is to file (and	by the USPTO to process)
an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu. Virginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the NOT SEND FEES OR	1.14. This collection is estable the depending upon the individual Chief Information Office COMPLETED FORMS TO	imated to take 12 indual case. Any coor, U.S. Patent and D THIS ADDRESS	minute: ommen Trader S. SEN	s to complete, including son the amount of tirenark Office, U.S. Depart of TO: Commissioner	g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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APPLICATION NO.	FILING DATE	NG DATE FIRST NAMED INVENTOR		CONFIRMATION NO.
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Joseph K. Hemby	, Jr.		GAMBEL	, PHILLIP
Naval Medical Res	earch Center Office of	Counsel	ART UNIT	PAPER NUMBER
503 Robert Grant Avenue Silver Spring, MD 20910-7500			1644 DATE MAILED: 12/09/201	0

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)
	09/027,205	JUNE ET AL.
Notice of Allowability	Examiner	Art Unit
	Dhillin Combal	1044
	Phillip Gambel	1644
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this or other appropriate communic GHTS. This application is subj	s application. If not included ation will be mailed in due course. THIS
1. This communication is responsive to <u>07/30/2010, 08/03/20</u>	<u>10</u> .	
2. The allowed claim(s) is/are <u>96,97 and 99-107</u> .		
 Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the: 	nder 35 U.S.C. § 119(a)-(d) or (f).
 Certified copies of the priority documents have 	e been received.	
Certified copies of the priority documents have	been received in Application N	lo
Copies of the certified copies of the priority do	cuments have been received in	this national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		eply complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.	
(a) ☐ including changes required by the Notice of Draftspers		PTO-948) attached
1) hereto or 2) to Paper No./Mail Date		,
(b) ☐ including changes required by the attached Examiner's		the Office action of
Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t		
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 Notice of Inform	nal Patent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Sumi	
2. In Notice of Dialiperson's Latent Diawing Neview (FTO-346)	Paper No./Ma	il Date .
3. Information Disclosure Statements (PTO/SB/08),	7. 🛛 Examiner's Am	endment/Comment
Paper No./Mail Date 4.	8. 🛛 Examiner's Sta	tement of Reasons for Allowance
· - · · · · · • • · · · · · · · · · · ·	9. 🔲 Other	
/Phillip Gambel/		
Primary Examiner, Art Unit 1644		

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Art Unit: 1644

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under Ex Parte Quayle, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 08/03/2010 has been entered.

2. Claims 96-97 and 99-107 are pending in the instant application

Claims 1-95 and 98 have been canceled previously.

EXAMINER'S AMENDMENT

- 3. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.
- 4. The title has been replaced with the following:
- -- METHODS OF DOWNREGULATING CCR5 IN T CELLS WITH ANTI-CD3 ANTIBODIES AND ANTI-CD28 ANTIBODIES -- .

REASONS FOR ALLOWANCE

5. The following is an Examiner's Statement of Reasons for Allowance:

Upon reconsideration of and in agreement with applicant's arguments, filed 07/30/2010, that Kwon was not prior art against this invention in that the relevant teachings of Kwon (i.e. "ligation of T cells with anti-CD3 antibodies and anti-CD28 antibodies induce an HIV resistant state") was not disclosed in USSN 08/409,851 filed 1995, but was first presented in USSN 09/007,097, filed 01/14/1998;

the previous prior art rejection under 35 U.S.C. § 103(a) as being unpatentable over June et al. (WO 95/33823) in view of Chang et al. (U.S. Patent No. 6,129,916), Levine et al. (International Immunology 7: 891-904, 1995), Kwon et al. (U.S. Patent No. 5,569,997) and Allaway et al. (US 2004/0086528 A1) has been withdrawn.

The prior neither suggests not teaches "ligation of T cells with anti-CD3 antibodies and anti-CD28 antibodies induce an HIV resistant state" and measuring the level of CCR5 RNA or protein expression in T cells contacted with anti-CD3 antibodies and anti-CD28 antibodies encompassed by the claimed methods.

Accordingly the instant claims are deemed allowable.

Application/Control Number: 09/027,205

Art Unit: 1644

6. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gambel whose telephone number is (571) 272-0844. The examiner can normally be reached Monday through Thursday from 7:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on (571) 272-0735.

The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ Phillip Gambel / Primary Examiner Art Unit 1644 Technology Center 1600 Art Unit 1644 December 2, 2010